

REMARKS

In view of the above amendments and following remarks, reconsideration of the objections and rejections, and further examination are requested.

Claims 1-17 are pending in this application, claims 1-6, 8-13, 15 and 16 stand rejected, claims 7 and 14 have been indicated as containing allowable subject matter, and claim 17 has been withdrawn from further consideration. Claims 1-9 and 16 are amended herein. No new matter has been added.

The Applicants greatly appreciate the Examiner's indication that claims 7 and 14 contain allowable subject matter and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The drawings have been objected to on the basis that Figures 1-11B should be designated by a legend such as "Prior Art." The Applicants have amended Figures 1-11B to be labeled as "Prior Art." New replacement formal drawings for Figures 1-11B have been prepared and are submitted herewith, and include those changes detailed above.

Accordingly, the Applicants respectfully request that the objection to the drawings be withdrawn.

Claims 1-9 and 16 have been objected to on the basis that "operable to" makes claim limitations following the term optional and does not require the steps to be performed. The Applicants have amended the claims to address the Examiner's concerns.

Accordingly, the Applicants respectfully request that the objection to claims 1-9 and 16 be withdrawn.

The claims have been rejected as detailed below.

Claims 1, 2, 10, 11 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' admitted prior art (see Part 2, Description of the Related art, pages 1-16) (hereinafter referred to as "AAPA") in view of Yasuda, Hiroshi ("International Standard for Multimedia Encoding") (hereinafter referred to as "Yasuda").

Claims 3-6, 8, 9, 12, 13 and 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Yasuda and further in view of Moriyama et al. (U.S. Patent No. 5,537,409) (hereinafter referred to as "Moriyama").

The above-mentioned rejections are traversed for the following reasons.

Claim 1 recites a multiplexer including, at least, an analysis unit for obtaining playback start time information that indicates a playback start time of a sample that is a smallest access unit of image data, audio data and text data included in media data, and a packetization part determination unit for determining, based on the playback start time information obtained by the analysis unit and in all the packets necessary for storing the media data, a packetization part of the media data such that playback start times of respective samples of the image data, audio data and text data that are included in the media data are made to be the same.

As admitted by the Examiner in the Office Action, AAPA does not disclose considering “playback times for audio and video that are made to be ‘the same’ or synchronizing for samples, when multiplexing media data in the conventional multiplexer.” The Examiner cited Yasuda as teaching this feature, and specifically asserted that Yasuda is from the same or similar fields of endeavor, e.g. for AV synchronization, method for multiplexing AV segments and synchronizing time duration between audio and video segments to corresponding “same time,” through methods as disclosed in Sections 11.3.1 and 11.3.3 of AV synchronization algorithm section, pages 5-9.

In contrast to the present invention, Yasuda does not disclose a packetization part determination unit for determining, based on the playback start time information obtained by the analysis unit and in all the packets necessary for storing the media data, a packetization part of the media data such that playback start times of respective samples of the image data, audio data and text data that are included in the media data are made to be the same.

Instead, Yasuda discloses implicit synchronization wherein a time difference T_1 between an audio (A) segment 1 and a video (V) segment 1 is defined to be within an appropriate range where the difference is virtually not detected, such as a range between 20 ms precedence and 50 ms delay (see Section 11.3.1). Moreover, Yasuda discloses synchronization by timestamp where synchronization is performed by delaying the decoding output of either audio or video depending on the result of a calculation of the time difference between the audio and video timestamps (see Section 11.3.3).

Furthermore, there is no disclosure or suggestion to modify Yasuda so that playback start times of the audio and video segments are made to be the same.

In other words, Yasuda does not disclose an analysis unit for obtaining playback start time information that indicates a playback start time of a sample that is a smallest access unit of image data, audio data and text data included in media data, and a packetization part determination unit for determining, based on the playback start time information obtained by the analysis unit and in all the packets necessary for storing the media data, a packetization part of the media data such that playback start times of respective samples of the image data, audio data and text data that are included in the media data are made to be the same, as recited in claim 1.

Regarding the combination of AAPA, Yasuda and Moriyama, Moriyama is relied upon in the rejection as disclosing a time sequential relation between actual video and audio information leading or lagging depending on the number of audio access unit “AAU” in a pack, and presentation start times for video and audio signals in reproducing. Moriyama is also relied upon as disclosing a coded frame image with types of pictures and a method for placing a sample of video data including intra frame information in a leading part of a packetization part.

In contrast to the present invention, Moriyama discloses a delay controller 34 which refers to an AAU sequence number in a data packet DP to acquire a difference between presentation start times for a video output and an audio output, and controls a delay amount of a first-in first-out memory 33 so that this delay amount matches with the acquired time difference. Accordingly, synchronous reproduction of the video signals and audio signals is achieved (see col. 9, lines 26-33). Thus, it is clear that Moriyama also fails to disclose or suggest the above-discussed features as recited in claim 1. Therefore, no obvious combination of AAPA, Yasuda and Moriyama would result in or otherwise render obvious the invention recited in claim 1.

It is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. Specifically, Applicants respectfully submit that Yasuda and Moriyama teach away from the present invention. The Applicants respectfully submit that by virtue of implicitly synchronizing with a time difference T_1 , and by synchronizing based upon a time difference between the audio and video timestamps,

Yasuda teaches against making playback start times of respective samples of image data, audio data and text data that are included in media data the same.

Moreover, the Applicants respectfully submit that by virtue of synchronizing audio and video by acquiring a difference between presentation start times for a video output and an audio output, and controlling a delay amount of a first-in first-out memory so that this delay amount matches with the acquired time difference, Moriyama teaches against making playback start times of respective samples of image data, audio data and text data that are included in media data the same.

Furthermore, modifying the present invention as recited in claim 1, by making the playback start times of respective samples of the image data, audio data and text data that are included in the media data different, renders the present invention unsatisfactory for its intended purpose because the playback start times would not be the same. Because the proposed modification renders the present invention unsatisfactory for its intended purpose, both Yasuda and Moriyama teach against the present invention.

Regarding claims 10 and 16, they are patentable over the references relied upon in the rejections for reasons similar to those set forth above in support of claim 1. That is, each of claims 10 and 16 similarly recites, in part, *obtaining playback start time information indicating a playback start time of a sample that is a smallest access unit of image data, audio data and text data included in media data by analyzing the media data, and determining, based on the playback start time information and in all the packets necessary for storing the media data, a packetization part of the media data such that playback start times of respective samples of the image data, audio data and text data that are included in the media data are made to be the same.*

Because of the above-mentioned distinctions, it is believed clear that claim 1, and claims 2-9 depending therefrom, claim 10 and claims 11-15 depending therefrom, and claim 16 are patentable over the references relied upon in the rejections. Therefore, it is submitted that claims 1-16 are clearly allowable over the prior art of record.

In view of the foregoing amendments and remarks, all of the claims in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe that there are any remaining issues which must be resolved before this application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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